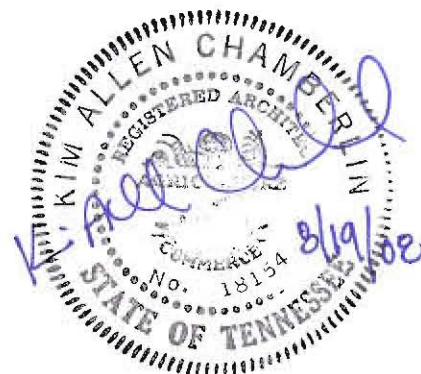


ADDENDUM NO. 2, August 19, 2008

RE: Upper Cumberland Regional Health Facility  
Cookeville TN  
SBC Project No. 408/009-01-2004

FROM: Thomas Miller & Partners, LLC and  
Upland Design Group Inc. – A Joint Venture  
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Crossville, TN. 38555  
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TO: Prospective Bidders:

This Addendum forms a part of the Contract Documents and modifies the original Bidding Documents dated 4-1-08, as noted below. Acknowledge receipt of this Addendum in the space provided on the Bid Form. Failure to do so may subject Bidder to disqualification.

This Addendum consists of 2 pages and 4 attachments (total of 17 pages).

#### APPROVED SUBSTITUTIONS

- Section 07 26 00 Viper Vaporcheck 16, 16-mil is approved for underslab applications
- Section 07 42 13 Metal Wall Panels – Alpolic Aluminum Composite Material (ACM) manufactured by Mitsubishi Chemical FP America, Inc, 401 Volvo Parkway, Chesapeake, VA 23320 is an approved manufacturer
- Section 07 61 00 Sheet Metal Roofing – Firestone UNA – Clad UC-3; 20" width is an approved substitute
- Section 08 14 00 Wood Doors - Mohawk Commercial Series 5 ply WDMA Heavy Duty FPC-5 is an approved manufacturer
- Section 09 51 00 CertainTeed is an approved manufacturer.
- Section 10 11 00 Visual Display Surfaces – New Products, Inc., Plano, TX is an approved manufacturer
- Section 12 24 13 Roller Window Shades – SolarFective, Toronto, Ontario, Canada is an approved manufacturer
- Section 26 32 13 Emergency Standby Engine Generator System – MTU-Detroit Diesel is an acceptable manufacturer

#### CHANGES TO SPECIFICATIONS

1. Section 07 61 00 Sheet Metal Roofing – Roofing material system shall be changed to Englert C1300 with 1-1/2" seam height; 180 degree seam; 24 ga.
2. Refer to Specifications Section 09 54 00. Insert the following paragraph: "1.9 Subject to Alternates. Work of this section is subject to Alternate #1. Base bid does not include these panels shown as "Acoustic Ceiling Panels" in Spaces 131, 145, 169 & 189."
3. Refer to Specifications. Insert attached Section 10 70 00 Exterior Sun Control Devices. This work is subject to Alternate #3.
4. Section 12 21 13 Horizontal Louver Blinds. Paragraph 2.1.A shall have Caco, Inc. Summit changed to Caco, Inc. Aluminum Maxi.
5. Section 12 32 00, insert the attached Section 12 32 00 manufactured Wood Casework.
6. Section 31 20 00 Earth Moving. Replace section with attached Section 31 20 00 (Rev.).
7. Section 31 34 19.16 Geotextiles, remove this section in its entirety.
8. Section 32 12 00 Flexible Paving. Add the following to the beginning of paragraph 2.1.A - "Aggregate base course has been installed through an earlier site prep package. Contractor shall be responsible to maintain and repair any damage resulting from this contract work as per the following specification".

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Upper Cumberland Regional Health Facility  
Cookeville, TN  
SBC Project No. 408/009-01-2004

9. Section 33 40 00 Site Utilities – Add the following to paragraph 1.2 Scope – “D. Utilities shall be connected to utilities constructed during site prep work in a previous contract. Contractor shall verify utility locations and inverts prior to beginning utility installation. Designer shall be notified of any discrepancies with the drawings”.

**CHANGES TO DRAWINGS**

10. Refer to Drawing A2.1. The floor finish in Space 201 shall be WDP (Wood Plank). The base shall be RB2.
11. Refer to Drawing A2.11. Doors 234A and 234B shall be lined with 1/8" lead suitable for x-ray protection.
12. Refer to Drawing A3.22 detail #7. The countertop material shall be changed to solid surface in lieu of recycled glass and concrete.
13. Refer to Drawing A4.15. Revise detail #1 as per the attached drawing A4.15R. This work is subject to Alternate #3. Base bid is sun shade in place. Alternate replaces sun shade with solar photovoltaic panels.
14. Refer to Drawing E001. Add the following to GENERAL NOTES: “C. An early Site Preparation and Utility Package will install all underground conduit (with conc. encasement) to 5' from the building out of locations shown on the drawing, including light poles, primary service, telephone services, etc. This contract will provide all conductor, concrete bases, connections, light pole bases, etc. to complete the work.”

**END OF ADDENDUM**

## **Section 10 70 00 Exterior Sun Control Devices**

### **Part 1 General**

#### **1.1 General**

Applicable provisions found in the Bid/Contract Requirements and Division 1, General Requirements apply to the Work under this Section.

#### **1.2 Description**

- A. Provide fixed Custom Sunshades as shown on the drawings, as specified, and as needed for a complete and proper installation.
- B. The drawings show the extent of the work, the dimensioned profile and depth of the sunshade to be provided.

#### **1.3 Submittals**

- A. Product Data: Submit specifications, data, and installation, instructions from the manufacturer of the Sunshades.
- B. Submit shop drawings for the system. Show anchorage, details and connections for all the component parts.
- C. Drawings shall include elevations, sections and specific details for each unit, condition.
- D. Samples: Submit one sample minimum 24" long of each material to be utilized at each Sunshade with appropriate finish.
- E. Warranty: Provide written warranty to the owner that all screen products will be free of defective materials or workmanship for a period of one year from date of installation.
- F. Quality Assurance:
  - 1. Single subcontract responsibility: Subcontract the work to a single firm that has had not less than six years experience in the design and manufacturing of work similar to that shown and required.
  - 2. Performance requirements: Design sunshades to accommodate local requirements for snow and wind loading. **\*\*PROVIDE ENGINEERING CALCULATIONS TO SUPPORT DESIGN.** Calculations to be by a registered engineer licensed in the state that the project is located. . Analysis of Blade Deflection to be limited to L/120, ¾", or as required by code.
  - 3. Sunshade must be mechanically assembled. Welded construction is not acceptable. Blades must be removable for repair or replacement.
  - 4. For quality and delivery control, sunshades must be purchased from a single source. Sub contracting of shade assembly is not acceptable.

### **Part 2 Products**

#### **2.1 Products**

Sunshades shall be Model 100-3DI by the C/S Group, Mundelein, IL. Equal product by Ametco; Willoughby, OH and AGS, Inc; Mokena, IL are approved.

## **2.2 Materials**

- A. Aluminum Extrusions: ASTM B211, Alloy 6063-T5.
- B. Fasteners: Fasteners shall be aluminum or stainless steel. Provide types, gauges and lengths to suit unit installation conditions.
- C. Anchors and Inserts: Use non-Ferrous metal or hot dip galvanized anchors and inserts for installation and elsewhere as required for corrosion resistance. Use stainless steel or lead expansion bolt devices for drill-in place anchors. Furnish inserts, as required, to be set into concrete or masonry work.

## **2.3 Fabrication, General**

- A. Provide fixed Sunshades and accessories of design, material, sizes, depth, arrangement, and thickness as indicated or as required for optimal performance with respect to strength; durability; and uniform appearance.
- B. Include supports, anchorage, and accessories required for complete assembly

## **2.4 Sunshade Construction**

- A. Cantilevered Sunshade
- B. Trellis Infill
- C. Components: All blades and outrigger components shall be 6063-T5 aluminum alloy.
  - 1. Outriggers shall 1/4" custom profile flat aluminum plate members, 6" high.
  - 2. Blades shall be 10" high X 3" girth, extruded aluminum airfoil design. Blades shall be factory assembled to outriggers using stainless steel, type F, thread cutting screws through internal screw slots in blades. Welding is not acceptable. Blades to be mechanically secured to allow for replacement in case of damage. Fasteners to be hex head.
  - 3. Sunshade units to infill into structural steel framing system. Design and supply of all steel to be by structural steel supplier.

## **2.5 Aluminum Finish**

- A. General: Comply with NAAMM "Metal Finishes Manual" for finish designations and application recommendations, except as otherwise indicated. Apply finishes in factory after products assembly. Protect finishes on exposed surfaces prior to shipment. Remove scratches and blemishes from exposed surfaces, which will be visible after completing finishing process.
- B. Provide color as indicated or, if not otherwise indicated, as selected by architect from manufacturers standard Kynar 500 colors.
- C. Fluorocarbon Coating: Inhibitive thermo-cured primer, 0.2 mil minimum dry film thickness, and thermo-cured fluorocarbon coating containing "Kynar 500" resin, 1.0 mil minimum dry film thickness.
- D. Furnish manufacturers twenty (20) year limited warranty against failure of the Kynar 500 finish.

### **Part 3 Execution**

#### **3.1 Inspection**

Examine openings to receive the work. Do not proceed until any unsatisfactory conditions have been corrected.

#### **3.2 Installation**

- A. Comply with manufacturer's instructions and recommendations for installation of the work.
- B. Verify dimensions of supporting structure at the site by accurate field measurements so that the work will be accurately designed, fabricated and fitted to the structure.
- C. Anchor Sunscreen to building substructure as indicated on architectural drawings.
- D. Erection Tolerances:
  - 1. Variation from level:  $\pm 1/8$ " maximum in any column to column space or 20'-0" runs, non-cumulative.
  - 2. Offsets in end-to-end or edge-to-edge alignment of consecutive members  $1/32$ ".
- E. Cut and trim component parts during erection only with the approval of the manufacturer or fabricator, and in accordance with his recommendations. Restore finish completely. Remove and replace members where cutting and trimming has impaired the strength or appearance of the assembly as directed.
- F. Do not erect warped, bowed, deformed or otherwise damaged or defaced members. Remove and replace any members damaged in the erection process as directed.
- G. Set units level, plumb and true to line, with uniform joints

**END OF SECTION**

## **Section 12 32 00 Manufactured Wood Casework**

### **Part 1 General**

#### **1.1 General**

Applicable provisions found in the Bid/Contract Requirements and Division 1, General Requirements apply to the Work under this Section.

#### **1.2 Scope**

The scope of work required under this section consists of commercially manufactured fixed modular laminate clad casework and components including countertops. Locks shall be included where called for on the drawings. All necessary scribes, fillers, finished ends & backs, backsplashes and cutouts shall be included to provide a complete, finished project.

#### **1.3 Related Sections**

- A. Blocking within walls where indicated: Division 6.
- B. Base molding: Division 9.
- C. Sinks and service fixtures, service waste lines, connections, and vents: Division 22.
- D. Electrical service fixtures: Division 26.

#### **1.4 Quality Assurance**

- A. Manufacturer: Minimum of 5 years experience in providing manufactured casework systems for similar types of projects, produce evidence of financial stability, bonding capacity, and adequate facilities and personnel required to perform on this project.
- B. Manufacturer: Provide products certified as meeting or exceeding ANSI-A 161.1-1998 testing standards.

#### **1.5 Submittals**

- A. Comply with Section 01 33 00, unless otherwise indicated.
- B. Product Data: Manufacturer's catalog with specifications and construction details.
- C. Shop Drawings: Indicate dimensions, description of materials and finishes, general construction, specific modifications, component connections, anchorage methods, hardware, and installation procedures, plus the following specific requirements.
  - 1. Include section drawings of typical and special casework, work surfaces and accessories.
  - 2. Indicate locations of plumbing and electrical service field connection by others.
- D. Casework Samples:
  - 1. Base cabinet: Cabinet conforming to specifications, with drawer and door.
  - 2. Wall cabinet: Cabinet conforming to specifications, with door.
  - 3. Cabinet samples shall be complete with specified hardware for doors, drawers and shelves.
  - 4. Component samples: Two sets of samples for each of the following:

- a. Decorative laminate color charts.
  - b. PVC and ABS edgings.
- E. Refer to Sections 01 33 00 and 01 81 13 for LEED submittal requirements including "LEED Submittal Form".

## **1.6 Product Handling**

- A. Deliver completed laminate clad casework, countertops, and related products only after wet operations in building are completed, store in ventilated place, protected from the weather, with relative humidity range of 25 percent to 55 percent.
- B. Protect finished surfaces from soiling and damage during handling and installation with a protective covering.

## **1.7 Job Conditions**

- A. Environmental Requirements: Do not install casework until permanent HVAC systems are operating and temperature and humidity have been stabilized for at least 1 week.
  - 1. Manufacturer/Supplier shall advise Contractor of temperature and humidity requirements for architectural casework installation areas.
  - 2. After installation, control temperature and humidity to maintain relative humidity between 25 percent and 55 percent.
- B. Conditions: Do not install casework until interior concrete work, masonry, plastering and other wet operations are complete.

# **PART 2 – PRODUCTS**

## **2.1 Acceptable Manufacturers**

- A. Manufacturer:
  - 1. TMI Systems Design Corporation.
    - A. Drawings and specifications are based on manufacturer's literature from TMI SYSTEMS DESIGN CORPORATION, 50 South Third Avenue West, Dickinson, North Dakota, 58601, Phone: 800-456-6716, fixed modular, flexible rail mounted, and mobile casework and accessories.
    - B. Equal products by LSI and Stevens are approved.

## **2.2 Materials**

- A. Core Materials:
  - 1. Certified Particleboard: SCS Certified 100% pre-consumer recycled wood fiber particleboard with no Urea Formaldehyde added during the manufacturing process.
    - a. Up to 7/8 inch thick: Industrial Grade average 47-pound density meeting ANSI A 208.1-1999, M-3 requirements.
    - b. 1 inch thick: Industrial Grade average 45-pound density meeting ANSI A 208.1-1999, M-3 requirements.
- B. Decorative Laminates: GREENGAURD Indoor Air Quality Certified
  - 1. High-pressure decorative laminate VGS (.028), NEMA Test LD 3-2000.
  - 2. High-pressure decorative laminate HGS (.048), NEMA Test LD 3-2000.

3. High-pressure decorative laminate HGP (.039), NEMA Test LD 3-2000.
  4. High-pressure cabinet liner CLS (.020), NEMA Test LD 3-2000.
  5. High-pressure backer BKH (.048), (.039), (.028), NEMA Test LD3-2000.
  6. Thermally fused melamine laminate, NEMA Test LD 3-2000, color matched with Wilsonart® Frosty White.
  7. Adhesive: Water based low Volatile Organic Compound (VOC), non-toxic, PVA adhesive.
- C. Laminate Color Selection: to be selected by the Designer.
- D. Edging Materials:  
3mm ABS NaturEdge™ Express Collection banding, machine profiled to 1/8 inch radius.

### 2.3 Specialty Items

- A. Support Members:
1. Countertop support brackets: Epoxy powder coated, 11 gauge steel with integral cleat mount opening and wire management opening.
  2. Undercounter support frames: Epoxy powder coated.
  3. Legs: Epoxy powder coated.

### 2.4 Cabinet Hardware

- A. Hinges:
1. Five knuckle, epoxy powder coated, institutional grade, 2-3/4 inch overlay type with hospital tip. 0.095 inch thick. ANSI-BHMA standard A156.9, Grade 1.
    - a. Doors 48 inches and over in height have 3 hinges per door.
    - b. Magnetic door catch with maximum 5 pound pull provided, attached with screws and slotted for adjustment.
- B. Pulls:
1. Door and drawer front pulls, are epoxy powder coated metal wire, 96mm spacing on screws. Pull design shall comply with the Americans with Disability Act (ADA).
- C. Drawer Slides:
1. Regular, kneespace and pencil: 100-pound load rated epoxy coated steel, bottom corner mounted with smooth and quiet nylon rollers. Positive stop both directions with self-closing feature. Paper storage, 150-pound load rated epoxy coated steel slides.
  2. File: Full extension, 150-pound load rated epoxy coated steel, bottom corner mounted with smooth and quiet nylon rollers. Positive stop both directions with self-closing feature.
- D. Adjustable Shelf Supports:
1. Injection molded transparent polycarbonate friction fit into cabinet end panels and vertical dividers, adjustable on 32mm centers. Each shelf support has 2 integral support pins, 5mm diameter, to interface pre-drilled holes, and to prevent accidental rotation of support. The support automatically adapts to 3/4 inch or 1 inch thick shelving and provides non-tip feature for shelving. Supports may be field fixed if desired. Structural load to 1200 pounds (300 pounds per support) without failure.



- E. Locks:
  - 1. Removable core, disc tumbler, cam style lock with strike.
  - 2. Elbow catch or chain bolt used to secure inactive door on all locked cabinets.

## 2.5 Fabrication

- A. Fabricate casework, countertops and related products to dimensions, profiles, and details shown.
- B. All casework panel components to be finished precisely to size and squareness within 0.01 inches utilizing a sizing process to ensure strict dimensional quality and structural integrity in the final fabricated product.
- C. Cabinet Body Construction:
  - 1. Tops and bottoms are glued and doweled to cabinet sides and internal cabinet components such as fixed horizontals, rails and verticals. Minimum 6 dowels each joint for 24 inch deep cabinets and a minimum of 4 dowels each joint for 12 inch deep cabinets.
    - a. Tops, bottoms and sides of all cabinets are Certified Particleboard core.
  - 2. Cabinet backs: 1/2 inch thick Certified Particleboard core.
    - a. Exposed back on fixed or movable cabinets: 3/4 inch thick Certified Particleboard with the exterior surface finished in VGS laminate as selected.
    - b. Flexible rail mounted cabinet backs: 3/4 inch thick Certified Particleboard structurally doweled into cabinet sides and top panels.
  - 3. Fixed base and tall units have an individual factory-applied base, constructed of 3/4 inch thick particleboard. Base is 96mm (nominal 4 inch) high unless otherwise indicated on the drawings.
  - 4. Base units, except sink base units: Full sub-top. Sink base units are provided with open top and a stretcher at the front, attached to the sides. Back to be split removable access panel.
  - 5. Side panels and vertical dividers shall receive adjustable shelf hardware at 32mm line boring centers. Mount door hinges, drawer slides and pull-out shelves in the line boring for consistent alignment.
  - 6. Exposed and semi exposed edges.
    - a. Edging: 1mm PVC.
  - 7. Adjustable shelf core: 3/4 inch thick Certified Particleboard up to 36 inches wide, 1 inch thick Certified Particleboard over 36 inches wide.
    - a. Front edge: 1mm PVC.
  - 8. Interior finish, units with open Interiors:
    - a. Top, bottom, sides, horizontal and vertical members, and adjustable shelving faces with thermally fused melamine laminate with matching prefinished back.
  - 9. Interior finish, units with closed Interiors:
    - a. Top, bottom, sides, horizontal and vertical members, and adjustable shelving faces with thermally fused melamine laminate with matching prefinished back.

10. Exposed ends:
    - a. Faced with VGS high-pressure decorative laminate.
  11. Wall unit bottom:
    - a. Faced with thermally fused melamine laminate.
  12. Balanced construction of all laminated panels is mandatory. Unfinished core stock surfaces, even on concealed surfaces (excluding edges), are not permitted.
- D. Drawers:
1. Sides, back and sub front: Minimum 1/2 inch thick Certified Particleboard, laminated with thermally fused melamine doweled and glued into sides. Top edge banded with 1mm PVC.
  2. Drawer bottom: Minimum 1/2 inch thick Certified Particleboard laminated with thermally fused melamine, screwed directly to the bottom edges of drawer box.
  3. Paper storage drawers: Minimum 3/4 inch thick Certified Particleboard sides, back, and sub front laminated with thermally fused melamine. Minimum 1/2 inch thick Certified Particleboard drawer bottoms screwed directly to the bottom edges of the drawer box. Provide PVC angle retaining bar at the rear of the drawer.
- E. Door/Drawer Fronts:
1. Core: 3/4 inch thick Certified Particleboard.
  2. Provide double doors in opening in excess of 24 inches wide.
  3. Faces:
    - a. Exterior: VGS High-pressure decorative laminate.
    - b. Interior: High-pressure cabinet liner CLS.
  4. Door/drawer edges: 3mm ABS NaturEdge™, external edges and outside corners machine profiled to 1/8 inch radius.
- F. Miscellaneous Shelving:
1. Core material: 3/4 inch or 1 inch thick Certified Particleboard.
  2. Exterior: VGS High-pressure decorative laminate.
  3. Edges: 3mm ABS NaturEdge™, external edges and outside corners machine profiled to 1/8 inch radius.

## 2.6 Decorative Laminate Countertops

- B. Countertop and window sill materials to be PaperStone Certified by Klip Tech Composites, or prior approved substitution.
- C. Color to be as selected by the Designer from standard colors.
- D. Material: FSC certified, 100% post consumer recycled paper combined with non-petroleum based phenols with no detectable formaldehyde when completed.
- C. Material shall be 1/2" thickness.

## PART 3- EXECUTION

### 3.1 Inspection

- A. The casework contractor must examine the job site and the conditions under which the work under this section is to be performed, and notify the building owner in writing of unsatisfactory conditions. Do not proceed with work under this

Section until satisfactory conditions have been corrected in a manner acceptable to the installer.

### **3.2 Preparation**

- A. Condition casework to average prevailing humidity conditions in installation areas prior to installing.

### **3.3 Installation**

- A. Erect casework, plumb, level, true and straight with no distortions. Shim as required. Where laminate clad casework abuts other finished work, scribe and cut to accurate fit.
- B. Adjust casework and hardware so that doors and drawers operate smoothly without warp or bind.
- C. Repair minor damage per plastic laminate manufacturer's recommendations.

### **3.0 Cleaning**

- A. Remove and dispose of all packing materials and related construction debris.
- B. Clean cabinets inside and out. Wipe off fingerprints, pencil marks, and surface soil etc., in preparation for final cleaning by the building owner.

### **3.5 Color Selection**

- A. Laminate Color Selection:
  - 1. Select from the full range of Wilsonart or Lamin-Art stock color charts for cabinet faces, exposed ends, open interiors, and countertops. Thermally fused melamine laminate matched to Wilsonart® Frosty White color.
- B. Hinge and Pull Color Selection:
  - 1. Select from your choice of stock colors (matched to Wilsonart®) Frosty White, Light Beige, Dove Grey, Black and Chrome.
- C. Miscellaneous Hardware Color Selection (support brackets, table frames, rail):
  - 1. Select from your choice of stock colors (matched to Wilsonart®) Frosty White, Light Beige, Dove Grey and Black.
- D. 1mm PVC Edge Banding Color Selection:
  - 1. Select from your choice of many 1mm PVC edgings available in a variety of solid, pattern and woodgrains matching laminate colors\*. Special order colors may impact cost and lead times.
- E. 3mm ABS Edge Banding Color Selection:  
Select from your choice of 3mm ABS NaturEdge™ Express Collection stock (13 woodgrain-through patterns).

End Of Section

## **Section 31 20 00 Earth Moving (Rev.)**

### **Part 1 General**

#### **1.1 General**

Applicable provisions found in the Bid/Contract Requirements and Division 1, General Requirements apply to the Work under this Section.

#### **1.2 Scope**

The work required under this Specification consists of all excavation and grading.

#### **1.3 Related Work**

- A. Paving, walks, and curbs are specified under Paving & Surfacing of DIVISION 31.
- B. Lawns and Planting are specified under Landscaping of DIVISION 32.
- C. Subsurface Exploration Report is available at Designer's Office.
- D. Refer to Division 1 for information and requirements of Testing for this work.

#### **1.4 References**

- A. The work described herein reflects recommendations provided in the Subsurface Exploration Report provided by QORE Property Sciences. Detailed recommendations and subsurface information can be found in this report.
- B. Owner has developed and submitted a Notice of Intent for Construction Storm Water Permit (NOI) and associated storm water pollution prevention plan (SWPPP) to the Tennessee Department of Environment and Conservation (TDEC). The Contractor shall be responsible for becoming familiar with the SWPPP and signing the NOI permit located at the local TDEC Environmental Assistance Center located on Willow Avenue in Cookeville, Tennessee. Contractor shall be responsible for maintenance of existing Best Management Practices (BMP's) and implementation of BMP's as necessary to prevent sediment loss from the site.

#### **1.5 Claims For Concealed Or Unknown Conditions**

All loss or damage arising out of the nature of the work, or from the action of the elements, or from any unusual obstruction or difficulty, or in any other natural or existing circumstance either known or unforeseen which may be encountered in the prosecution of the work, shall be sustained and borne of the contractor at his own cost and expense.

#### **1.6 Elevations And Grades**

- A. Elevation and grade lines shown on the Drawings indicate the height in relation to a datum point noted on the drawings as "bench mark".
- B. The words "finished grades" as used herein mean the required final grade elevations indicated on the Drawings. Should finished grades shown by spot elevations conflict with those shown by contours, such discrepancies shall be referred to the Engineer for adjustment before any work affected thereby is performed.

#### **1.7 Water Runoff**

- A. The Contractor shall conduct all grading activities to not allow "sediment loss" to adjacent sites or roadways.

- B. Provide silt fence on down slope of all stripped areas and as shown on the SWPPP.
- C. Comply with the Water Quality Control Act of 1971, including revisions, and other applicable laws, ordinances, and regulations.

**1.8 Protection Of Property And Utilities**

- A. The Contractor shall assume responsibility for protection of benchmarks, monuments, and other reference points. The Contractor shall replace, as directed, any reference points removed or destroyed during construction.
- B. The Contractor shall assume responsibility for protection of public streets, curbs, and utilities from damages from the Contractor's operations. Plan work to avoid ponding, flooding, and sediment loss on site and upon adjacent property.
- C. Meet the requirements of all rules and regulations governing the respective utilities. Protect active utilities from damage during construction.
- D. Provide, set, and remove all bracing, shoring, and sheet piling required to prevent cave-ins.
- E. Provide and maintain all pumping facilities required to keep excavation free of water.
- F. Required blasting shall be performed using the minimum practical charges and in strict accordance with all regulations governing this work. Blast area shall be covered with steel wire blast matting. All required precautions, shall be taken to prevent damage to persons and property.

**1.9 1.10 Rock Excavation**

- A. Rock excavation shall be considered as unclassified excavation. All unclassified excavation shall be included in the Contractors Base Bid. No Change Orders will be issued due to rock excavation.
- B. The Contractor is encouraged to review the Subsurface Exploration Report.

**1.11 Blasting**

- A. Perform blasting operations using skilled personnel, in compliance with all governing regulations. Comply with ANS A10.1 "Safety Code for Building Construction and Tennessee Blasting Regulations.
- B. Do not store explosives on site at any time.
- C. Conduct blasting operations using explosives of such quantity and power, and fired up such sequence and locations, as not to injure personnel or damage property, or damage adjacent work.
- D. Assume full responsibility for damages resulting from or attributable to blasting operations.

**1.12 Disposition Of Utilities**

- A. If active utilities are encountered in the course of excavation other than those indicated on the Survey, protect them from damage and relocate them in accordance with the Engineer's written instruction. Remove inactive utilities if such are encountered.
- B. Execute all work under this heading in conformity with the rules and regulations of the utility involved.

## **Part 2 Products**

### **2.1 Fill**

- A. Material for filling and backfilling shall be clean subsoil free from rubbish, debris, roots, topsoil, boulders in excess of 0.5 cu., ft., or other foreign matter preventing uniform, controllable compaction.
- B. Provide clean fill material as required if a sufficient quantity of suitable material is not available from the required excavation on the site.

### **2.2 Topsoil**

Topsoil shall be a fertile, friable, natural soil of loamy character, free of clay subsoil, clay lumps, or stones in excess of 1" in greatest dimension. Topsoil shall be typical of the project locality and shall contain no chemicals harmful to plant growth.

## **Part 3 Execution**

### **3.1 Obstructions**

Remove entirely any existing walls, floors, footings, piers, and other construction from under areas of new construction.

### **3.2 Excavating Clearance And Depths**

- A. Excavations for foundation walls, etc., shall extend as far as is necessary for safety but not less than 18" outside of walls for inspection, waterproofing, placing and removing of forms, etc. These spaces shall be left open until all work has been inspected and approved by the Designer.
- B. All exterior footings shall be excavated to such depth that the bottom of the footings will not be less than 24" below finish grade.
- C. Footing trenches shall be excavated to required depths to obtain suitable soil bearing pressure as determined by testing agency.

### **3.3 Frost Protection**

Make no excavations to the full depth indicated when freezing temperatures may be expected unless the footings or slabs can be poured immediately after the excavation has been completed. Protect the bottom of excavations from frost if placing of the concrete is delayed.

### **3.4 Fill**

Fill shall be placed in uniform layers not more than 8" thick, measured loose. Moisten each layer as required to insure good bonding and maximum compaction by rolling. Work the layer with sheep's foot roller and compact top layer with smooth-wheel roller weighing not less than 10 tons, continuing rolling until there is no "creep" ahead of the roller. Compact fill in areas where it is impractical to use wheeled equipment by moistening and mechanical tamping.

### **3.5 Backfilling**

- A. Only clean #57 crushed stone shall be used for backfilling. No backfilling shall be done until the foundations, piping or other work in excavation has been inspected and approved by the

Designer. Backfills shall not be placed against the walls until they have attained sufficient strength.

- B. All backfill shall be thoroughly compacted and tamped in 6" layers using pneumatic or gasoline-powered tampers or other suitable means.

### **3.6 Compaction**

- A. All compacted fill shall be constructed by spreading acceptable soil in loose layers not more than 8 inches thick. The soils used within the proposed building and paved areas should be compacted in thin lifts to at least 98 percent of the standard Proctor maximum dry density (ASTM D-698). The upper 24 inches of fill beneath pavements and upper 12 inches beneath grade slabs should be compacted to 100 percent.
- B. The moisture content of the fill soils should be maintained within +3 and -3 percentage points of the optimum moisture content determined from the standard Proctor compaction test. This provision may require the contractor to dry soils during periods of wet weather or wet soils during the hot summer months. The plasticity index of soils used for fill should be less than thirty.
- C. The fill surface must be adequately maintained during construction in order to achieve an acceptable compacted fill. The fill surface should be sloped to achieve sufficient drainage and to prevent water from ponding on the fill. If precipitation is expected while fill construction is temporarily halted, the surface should be rolled with rubber tired or steel drummed equipment to improve surface run-off. If the surface soils become excessively wet or frozen, fill operations should be halted and a geotechnical engineer should be consulted for guidance.
- D. The edge of the compacted fill should extend horizontally beyond the outside edge of the building foundations, areas of proposed future building expansion and beyond paved areas at least five feet before sloping. Compacted fill slopes shall be constructed at 2-1/2H: 1V or flatter. Fill slopes should be protected from erosion by grassing or by other means.

### **3.7 Grading**

- A. Finished grades shall be brought to the levels shown on the Drawings, and shall be uniformly pitched away from the building as indicated or directed. Terracing and grading of the yard around the building shall be done according to the plot plan and other drawings.
- B. Where not indicated otherwise, project site areas outside the building shall be given uniform slopes between points for which finished grades are shown, or between such points and existing established grade except that vertical curves or rounding shall be provided at abrupt changes in slope.
- C. The finish surface shall be free from any lumps of earth, rocks, stones, debris, or other improper materials, no trees, trunks, shrubs, stumps, undergrowth, or building rubbish will be permitted in the grading.
- D. Prior to any construction activities, the Contractor shall check Site Preparation Package rough grading elevation to ensure the grade has been constructed to plan for stone grade in the parking lots and access roads and earthen sub-grade for the building pad, sidewalks, etc. If the Contractor feels that the rough grading has not been constructed to the grade shown on the drawings, he shall notify the Engineer in writing with the areas of discrepancy described. Once construction activities have begun, the contractor shall be responsible for any adjustments to the grade required.

### **3.8 Disposal**

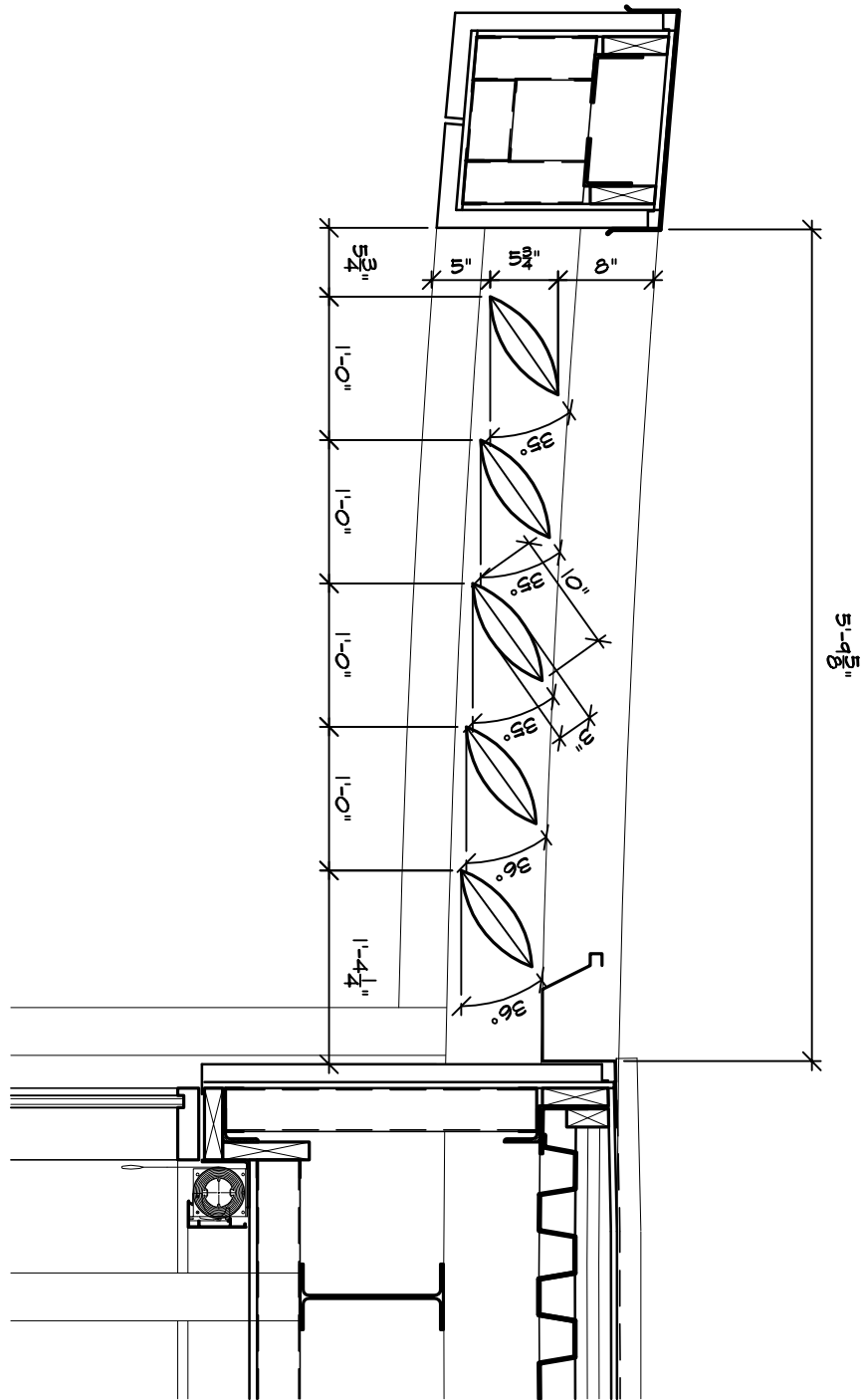
Remove promptly from the site and dispose of all debris and all excavated materials not necessary for or not suitable for backfilling or grading.

### **3.9 Cleaning**

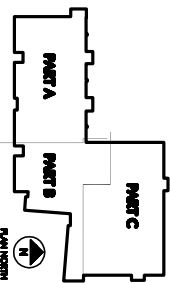
Keep construction area clear at all times of accumulation of waste and debris. At the completion of construction, remove all equipment and temporary construction and make a final cleaning of debris and surplus materials, making careful provision to avoid burying any building materials.

END OF SECTION





SUBJECT TO ALTERNATE #3  
**SUN SHADE DETAIL**  
 NTS  
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A4.15R

SUNSHADE DETAIL



UPPER CUMBERLAND REGIONAL HEALTH FACILITY

COCKEVILLE, TENNESSEE

SBC PROJECT NO. 408/008-01-2004 - 02

OWNER  
 STATE OF TENNESSEE  
 DEPARTMENT OF FINANCE AND ADMINISTRATION  
 FOR THE DEPARTMENT OF HEALTH

ttmp/udg

THOMAS, MILLER, & PARTNERS, LLC / UPLAND DESIGN GROUP, INC., JV

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